

## **SMART GROWTH**

## Challenge

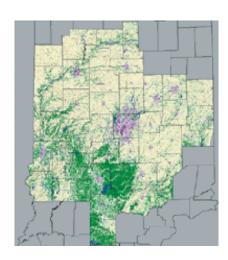
While Indiana communities rank high on many quality of life factors, they often place lower in environmental and health areas. At the core of the problem are often-conflicting agriculture, urban development and non-metropolitan growth land resource issues.

## **Action**

Indiana University Purdue University Indianapolis (IUPUI) uses GIS to educate decision-makers about "smart-growth." The concept of smart-growth embraces economic development without sacrificing environmental or health assets.

Using GIS, the IUPUI Geography Department provides information that helps local communities make informed decisions that balance land use, development, and the environment. Intelligent planning requires taking into account information on land cover, demographics, brown-fields, natural resources, and infrastructure. GIS is the ideal tool for integrating and analyzing these data.

IUPUI used GIS and satellite images to map land cover and combine it with demographic data like education and income levels. They also included land cover types and calculated trends in average rates of loss of agricultural and forest land to development.



Map showing land cover - the first step toward planning for smart growth.

## **Results**

The results of the analysis provided base-line data to measure change over the coming years, and give a birds-eye view of development trends statewide to local jurisdictions. The information is being used to support local decision-making by providing land cover change maps for land use planning to every county in Indiana.